

We claim:

1. An article comprising multimode optical fiber having an essentially circular core with a twist impressed on the core, the twist being at least one per meter of
5 optical fiber.

2. Article according to claim 1, wherein the twist alternates between clockwise twist and counterclockwise twist.

10 3. Article according to claim 2, wherein the twist is at least four per meter of optical fiber.

4. Article according to claim 2 wherein the core has an ovality of less than 6%.

15 5. A method for the manufacture of multimode optical fiber comprising the steps of:

(a) preparing a multimode optical fiber preform, the preform having a core and a cladding with the core of the preform having an ovality of less than 6%,

20 (b) heating the preform,

(c) drawing an optical fiber from the preform, and

(d) twisting the drawn optical fiber during step (c).

6. The method of claim 5 wherein the twisting alternates between clockwise twisting and counterclockwise twisting.

7. The method of claim 6 wherein the twisting is at least one per meter of drawn fiber.

8. The method of claim 7 wherein the twisting is at least four per meter of drawn fiber.

9. The method of claim 5 wherein the optical fiber is silica-based.

10. The method of claim 5 wherein the ratio of the core diameter to the cladding diameter is at least 0.2.

11. The method of claim 10 wherein the core diameter is at least 30 microns.

12. The method of claim 5 wherein the twisting has a spin frequency f , and f is varied during step (d).

13. The method of claim 5 wherein the twisting has a non-sinusoidal spin pattern.

14. The method of claim 5 wherein the spin pattern is changed during step (d).